

## **CHAPTER 6. TRANSMITTER AUTHORIZATION DOCUMENTS AND CALL LETTER ASSIGNMENTS**

**600. PURPOSE.** This chapter describes the procedures for issuing and posting transmitter authorization documents and the guidelines for assigning call signs to all transmitters.

**601. FACILITY TRANSMITTING AUTHORIZATION DOCUMENT (FTA).** All transmitters authorized must have appropriate documentation posted for identification and certification purposes. In FAA, there are two basic forms, a certificate style and a metallic label.

**a. For all fixed, base, and land transmitters,** the certificate is used. Currently, it is FAA Form 6050-1, Facility Transmitting Authorization. See figure 6-1.


**(1) Each facility** shall have its own document and its unique document number for file purposes. The number shall consist of two letters identifying the region, followed by a number. The letters and numbers will remain for that site as long as the site exists. Whenever there are modifications to any assignment at that facility, a new document shall be issued, with an added letter starting with "A." When the assignments are subsequently modified, documents will contain sequential sub-letters, "B," "C," etc. until "Z." After "Z," the letter will start again at "A." The original document shall be posted at the site.

**(2) The Automated Frequency Management program (AFM)** now in use for frequency request/authorization will generate one FTA for each facility. This program will contain a database of all FTA's issued.

**(3) Emission designators** for major FAA systems can be found in the appendix.

**b. For all mobile transmitters,** the identification label, FAA Form 6050-2, Transmitter Identification and Operation Authorization (TIOA), shall be used. For hand held transceivers, either the Form 6050-2 or a smaller equivalent may be used. The call letters of the unit will be typed or inked on it before applying to the transmitter. Because the metallic labels stick very firmly, any changes in call letters should be accomplished by placing the replacement label directly over the old one. The procedure for assignment of call letters will be covered later. If the unit is transferred to a different organization or shipped to the FAA Depot for exchange and repair, a new identification label will be issued. A sample of both TIOA forms is shown in figure 6-2.

**FIGURE 6-1. FAA FORMS 6050-1, FACILITY TRANSMITTING AUTHORIZATION (REDUCED)**

		UNITED STATES OF AMERICA				AUTHORIZATION NUMBER		
		DEPARTMENT OF TRANSPORTATION				CE 1		
FEDERAL AVIATION ADMINISTRATION								
<b>FACILITY TRANSMITTING AUTHORIZATION</b>								
<p>In accordance with authority granted the Federal Aviation Administration by the National Telecommunications &amp; Information Administration through the Interdepartmental Radio Advisory Committee, this Authorization is issued for the operation of this facility.</p>								
FACILITY: CAPE GIRARDEAU, MO				COORDINATES: 37 13'18"N 089 33'25"W				
FREQUENCY	FAC. TYPE	MAX. POWER	CLASS	TYPE OF SERVICE	COST CENTER	IDENT	FAA SERIAL	MISCELLANEOUS REMARKS
109.500 MHz		15.0 W	RLL	LOCALIZER			723617	RWY=10
993.000 MHz	DME	100.0 W	RN	LOC DME		CGI	784521	RWY=10
20 May 1996		Central					1 of 1	
EFFECTIVE DATE		FAA REGION		FREQUENCY MANAGEMENT OFFICER			PAGE	

FAA Form 6050-1 (10-95)

NSN: 0052-00-688-6001

**FIGURE 6-2. TIOA FORM FOR MOBILE/PORTABLE/HANDHELD TRANSMITTERS**

DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION  
TRANSMITTER IDENTIFICATION  
AND OPERATION AUTHORIZATION

THE CALL SIGN SHOWN BELOW IS TO BE TRANSMITTED AT THE COMMENCEMENT AND TERMINATION OF A COMMUNICATION OPERATION, AND AT THE END OF EACH TRANSMISSION, OR AT 15 MINUTE INTERVALS.

**CALL SIGN** **DCAS618M**

RECORD DATA FILED IN REGIONAL FREQ. MGMT

FEDERAL AVIATION ADMIN.  
TRANSMITTER IDENTIFICATION  
OPERATION AUTHORIZATION  
CALL SIGN

**DCAS618M**

**602. REQUESTS FOR FREQUENCY ACTION.** Frequency requests from entities within the region should be standardized for record purposes. This will assure the FMO receives all the information needed with the request. A sample regional form is shown in figure 6-3.

**FIGURE 6-3. SAMPLE OF TYPICAL REGIONAL FREQUENCY REQUEST FORM (REDUCED)**

FREQUENCY ENGINEERING REQUEST EQUIPMENT AND ANTENNA LOCATION			
To be completed by the Frequency Manager only			
GMF S/N	REGIONAL S/N		
FREQUENCY	EMISSION		
STATION CLASS	DATE ENTERED INTO SYSTEM		
Submit To Frequency Management		Detailed Instructions Below	
<input type="checkbox"/> NEW FACILITY	<input checked="" type="checkbox"/> RELOCATION	<input type="checkbox"/> CHANGE	<input type="checkbox"/> DELETE
REQUEST DATE: <u>4-15-98</u>		DATE REQUIRED: <u>ASAP</u>	
ORIGINATOR: <u>Khanh Tran</u>		PHONE: <u>310-348-5485</u>	
ROUTING SYMBOL <u>AWP-454.14</u>		PROJECT/JOB <u>NJT</u>	
FACILITY:			
Type of Facility	<u>RTR</u>	ID	<u>MPA</u>
Location	<u>Mill Valley CA</u>	Control Station	<u>NCT</u>
Hours of Operation	<u>24</u>	Service Area Radius in Miles	<u>60</u>
Generic Location		Service Alt (MSL)	<u>18,000'</u>
General Comments <u>Two more frequencies needed at this site. One UHF and One VHF. One suggestion is to relocate 288.3 from Stockton, or NGZ frequencies 279.5 or 385.4 decomm from Bay Tracon. Try 120.95 from MOD or 127.75 from SCK.</u>			
TRANSMITTER:			
Manufacturer	<u>Motorola</u>	Model Number	<u>CM-200</u>
Type of Facility (VOR, DME, COM, etc.)	<u>RTR</u>		
Type of Modulation:			
<input checked="" type="checkbox"/> AM	<input type="checkbox"/> FM	<input type="checkbox"/> PULSE: Rate	<u>Width</u>
Number of Channels		Bandwidth/Deviation	
Power Output	<u>10 Watts</u>		
TRANSMIT ANTENNA:			
Manufacturer	<u>TACO</u>	Model	<u>D2276/D2277</u>
Type	<u>Collinear</u>		
<input type="checkbox"/> Directional	<input checked="" type="checkbox"/> Non-Directional	Polarization	<u>Azimuth</u>
Latitude	<u>37° 55' 39.0"</u>	Longitude	<u>122° 35' 15.0"</u>
Site Elevation (MSL)	<u>2604 ft.</u>	Antenna Height	<u>20 ft.</u>
		Gain	<u>1 db</u>
RECEIVER:			
Manufacturer:	<u>Motorola</u>	Model Number	<u>CM-200</u>
Receiver Location:		Co-located With	
Receive Antenna:			
Manufacturer:		Model Number:	
<input type="checkbox"/> Directional	<input checked="" type="checkbox"/> Non-Directional	Polarization	<u>vert</u>
Latitude:	<u>37° 55' 39.0"</u>	Longitude:	<u>122° 35' 15.0"</u>
Site Elevation (MSL)	<u>2604 ft.</u>	Antenna Height	<u>20 ft.</u>
		Gain	<u>1 db</u>

**603. CALL LETTER ASSIGNMENT.** All transmitters that are in use shall be identified by assigned call letters to meet international requirements, to help users know with whom they are communicating and to identify signals in case of interference.

**a. Most NAVAIDS are identified** in accordance with Order 7350.6, Location Identifier Handbook.

**b. COMM facilities** are voice identified by facility; e.g., "Denver Tower," "Kansas City Center," etc.

**c. HF, VHF, and UHF non-aeronautical** service voice transmitters are identified by standardized alpha-numeric call signs. They are the systems described in Chapter 17, Land Mobile and Other FM Communications Systems Frequency Engineering.

**(1) HF call signs** will be issued by ASR-100 in accordance with the standard operating procedure "Procedure for Assigning Call Signs," a policy letter to Regions.

**(2) VHF/UHF Land Mobile** call systems shall be managed and issued by the FMO in accordance with paragraphs 604 and 605.

**604. LAND MOBILE CALL SIGNS.** Land mobile call signs shall be formulated and assigned in accordance with subparagraphs a. through e., below.

**a. FM Repeater stations** call signs shall consist of the prefix "FAA" followed by the repeater's three- or four-character facility identifier, as shown in the Facility Master File (FMF).

**b. FM Base, Mobile, and Portable** transmitters call signs shall consist of the most commonly recognized area identifier where the station is located, followed by a user identifier issued according to figure 6-4.

**c. Stations located at a regional office** use the regional identifier (e.g., "ACE"). Special organizations will be identified as follows:

Washington Headquarters      AHQ

Metropolitan Wash. Airports      MWA

FAA Technical Center      ACT

Aeronautical Center      AAC

**FIGURE 6-4. USER ORGANIZATION IDENTIFIERS**

Organization	Identifier
Washington headquarters, FAA Technical Center, Aeronautical Center, Regional Administrator, Regional COMM Control Center	001-099
Flight Standards	100-199
Civil Aviation Security	200-299
Aircraft Certification	300-399
AF Division (includes Facilities & Establishment group)	400-499
AF SMO's	500-999

**d. An alphabetic character** following the user identifier will identify the station type thus:

B - Base station

M - Mobile station

P - Portable (e.g., handheld)

X - Other (e.g., portable repeater)

**e. For example:** DCA 618M would identify an AF SMO mobile radio at Washington National Airport.

**605. STATION IDENTIFICATION REQUIREMENTS.** Technically, mobile units communicating with each other or a base station in simplex need not identify if the associated base station identifies. But since much of mobile communication is through a repeater, and identification must be used during that time, it should become standard to use the assigned call sign during every communication. The NTIA Manual paragraph 6.5.2 states, "Each station shall transmit its assigned call sign on each frequency in use at the beginning and end of operation, and at least once an hour. More frequent identification may be made if delay to traffic will not result." Fixed, Land and Mobile (including hand-held) stations must identify this way. Repeater transmitters are presently identified by the voice identification of the stations being repeated. In the future, repeaters will have automatic Morse code or digital identifiers installed which will contain the call assigned by the FMO as described in this chapter.

**606. thru 699. RESERVED.**